

MFR-2201

Marmonix Metal Tube Rotameter

Overview:

Marmonix Float flow meter MFR-2201

is made up of flow sensor and flow indicator. Float is placed vertically inside of conical measuring tube and can freely

Move up and down along the conical tube owing to

hydrodynamic effects. A high performance permanent magnet is set inside float, by this way the magnetic field around permanent magnet will change along with the float moving up and down.

When fluid keeps a stable flow value and float locates in a dynamic balance state in position, the magnetic field around permanent magnet keeps constant also.

The magnetic signal will be transmitted in non contact form by means of the flow Indicator mechanically connected to conical tube.

In another word, the indicator is able to detect and process Flow value of liquid by magnetic drive system and finally the corresponding flow rate value can be read from the scale on site. Also it can indicate outputs as standard electrical signal (4-20) mA / hart communication protocol.

Features:

- Diameter:DN15-DN150
- Range ratio:10:1 (DN≤100),5:1 (DN>100)
- protection:IP65
- Viscosity:≤250 mPa.s
- Medium Temperature:-80~250



SPECIFICATION

Measuring Medium	Liquid, gas, steam etc.
Environment Temperature	-25°C~+100°C, High Temperature Type:300°C
Accuracy	Normal type:±2.5%, high accuracy type:±1.5%
Medium Viscosity	DN15:≤5mPa.s ≤30mPa.s; DN25:≤250mPa.s; DN50-150:≤300mPa.s
Flow Range Ratio	10:01
Power Supply	24VDC,3.6V lithium battery power
Power voltage influence	≤±0.1%F.S
Load Influence	≤±0.1%
Max Working Pressure	DN15~DN50:4.0MPa; DN80~DN150:1.6MPa
Pipe Connection	Flange, Thread, Quick coupling
Shell	Aluminum Alloy
Protection Class	IP65,IP67
Explosion Proof	ExialICT1~T6

MODEL SELECTION

Indicator Type	Local Indicator	Z						
	LCD Indicator With Ouput	D						
Norminal Caliber	DN15		15					
	DN25		25					
	DN40		40					
	DN50		50					
	DN80		80					
	DN100		100					
	DN150		150					
Structure	Bottom-Top			/				
	Left-Right (Horizontal)			H1				
	Right-Left (Horizontal)			H2				
	Side-Side			AA				
	Bottom -Side			LA				
	Thread Connection			S				
	Quick Coupling Connection			M				
Body Material	304SS			R4				
	316SS			R6				
	316LSS			R6L				
	Hastelloy C			Hc4				
	Titanium			Ti				
	Liner F46(PTFE)			F				
Indicator Type	Linear Indicator					M7		
	Nonlinear Indicator (Local Indicator Display Instataneous Flow)					M9		
Combination Function	24VDC;Remote Transfer 4~20mA Standard Current Signal						S	
	24VDC;Remote Transfer 4~20mA,Local LCD Display Instantaneous & Accumulative Flow						Z	
	Local Lithium Battery Power ;Local LCD Display Instantaneous & Accumulative Flow						D	
Added Function	Measuring Tube With Thermal Preservation / Heat Insulation Jacket							T
	Measure Medium Temperature Higher Than 120° C							

FLOW RANGE

Diameter (mm)	Working Number	Flow Range			Pressure Loss kpa		
		Water L/h		Air m ³ /h	Water Kpa		Air
		Normal Type	Anti-corrosion	Normal type Anti-corrosion type	Normal Type	Anti-corrosion	
15	1A	2.5~25	--	0.07~0.7	6.5	-	7.1
	1B	4.0~40	2.5~25	0.11~1.1	6.5	5.5	7.2
	1C	6.3~63	4.0~40	0.18~1.8	6.6	5.5	7.3
	1D	10~100	6.3~63	0.28~2.8	6.6	5.6	7.5
	1E	16~160	10~100	0.48~4.8	6.8	5.6	8
	1F	25~250	16~160	0.7~7.0	7	5.8	10.8
	1G	40~400	25~250	1.0~10	8.6	6.1	10
	1H	63~630	40~400	1.6~16	11.1	7.3	14
25	2A	100~1000	63~630	3~30	7	5.9	7.7
	2B	160~1600	100~1000	4.5~45	8	6	8.8
	2C	250~2500	160~1600	7~70	10.8	6.8	12
	2D	400~4000	250~2500	11~110	15.8	9.2	19
40	4A	500~5000	300~3000	12~120	10.8	8.6	9.8
	4B	600~6000	350~3500	16~160	12.6	10.4	16.5
50	5A	630~6300	400~4000	18~180	8.1	6.8	8.6
	5B	1000~10000	630~6300	25~250	11	9.4	10.4
	5C	1600~16000	1000~10000	40~400	17	14.5	15.5
80	8A	2500~25000	1600~16000	60~600	8.1	6.9	12.9
	8B	4000~40000	2500~25000	80~800	9.5	8	18.5
100	10A	6300~63000	4000~40000	100~1000	15	8.5	19.2
150	15A	20000~100000	--	600~3000	19.2	--	20.3